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Service Announcement

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TO: WaTech Network Customers

FROM: Chris Craig
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SUBJECT: **Transition to BGP Routing Protocol update**

WaTech has adjusted the timeline for the BGP Routing Protocol transition. The original communication on this subject was dated Oct. 21, 2015.

Transition planning continues for this activity but our data collection and evaluation of existing router hardware and IOS levels has taken longer than anticipated. **Network customers will be contacted in phases and can expect to hear from us by the end of June, 2016 regarding projected transition dates.**

If your agency is interested in participating in this effort now, please contact your agencies WaTech WAN coordinator, or the WaTech Service desk.

Additionally, WaTech plans to have all new installations of Customer Edge devices to be provisioned utilizing BGP routing protocol starting March 1, 2016.

WaTech Network Services has historically utilized Enhanced Interior Gateway Routing Protocol (EIGRP) as the routing protocol between the WaTech network and customer edge (CE) devices.

The previous service announcement on this subject communicated our plans to transition from EIGRP to Border Gateway Protocol (BGP), between the WaTech network and CE devices.

The transition is being made for a few reasons.

Scalability: EIGRP was designed to handle smaller-sized routing tables in an enterprise network environment. BGP is an exterior gateway protocol which can scale up to hundreds of thousands of routes on very large scale networks.

Flexibility: BGP utilizes routing policy attributes to control prefix advertisement and best path selection. BGP provides more flexible routing and traffic management than EIGRP.

Reliability: BGP uses TCP for more reliable transport of the peer adjacency and routing exchange. It takes advantage of all TCP functions such as fragmentation, retransmission, acknowledgement and sequencing. This greatly enhances BGP capabilities in connection establishment, maintenance and routing information accuracy.

Convergence: BGP is a slow convergence protocol; however WaTech is able to achieve faster convergence by fine turning BGP timers in the configuration.

Manageability: BGP provides broader commands in validating routes and path selection. They are also effective tools in troubleshooting.

Customers currently using EIGRP on the LAN side of the CE devices may continue to do so. This change only affects the WaTech to CE connections. WaTech already utilizes BGP protocol at several customer locations.

Customer impact will be coordinated and is expected to be minimal. Service to customer edge (CE) devices at remote locations will not be unexpectedly impacted. In some cases, CE devices may require software and firmware upgrades, which will require brief service interruptions. Such requirements will be identified, documented, and coordinated with each customer.

Additional information will be communicated to each agency individually by the end of June 2016.

Contact the WaTech Service Desk, 360-753-2454 or 888-241-7597 or servicedesk@watech.wa.gov for more information.